

Concept Document
Addendum No. 1

Elliott Bay/Duwamish Restoration Program

Prepared for the
Elliott Bay/Duwamish Restoration Program Panel
by the
King County Water Pollution Control Division

Panel Publication 14

Elliott Bay/Duwamish Restoration Program
NOAA Restoration Center Northwest
National Marine Fisheries Service
7600 Sand Point Way NE
Seattle, WA 98115-0070

(206) 526-4338
(FAX) (206) 526-6665

November 1996

Addendum No. 1 to Concept Document

Addendum No. 1 of the *Concept Document*, June 1994, includes the following descriptions of habitat development sites 1 and 2 and a revised "Table 5: Potential Habitat Development Site Ranking."

Description of Habitat Development Sites

Site 1. This site is located in the Turning Basin area, upstream of the navigable waterway, on the east bank of the Duwamish River. It is adjacent to a Boeing Company office complex, grocery warehouse and tank-truck facility. The 4.6-acre site ranges between 13 feet and 15.5 feet in elevation.

Additional Site Considerations

- This portion of the Duwamish River is believed to be an area important to juvenile salmonid saltwater transition (Eric Warner and Robert Fritz, 1995. *The Distribution and Growth of Green River Chinook Salmon and Chum Salmon Outmigrants in the Duwamish Estuary as a Function of Water Quality and Substrate*. Auburn, Washington: Muckleshoot Indian Tribe.) A restoration project at this site would also benefit benthic and epibenthic invertebrates, marine fish, a variety of shorebirds and upland mammals.
- The project area has a natural shoreline and a well-developed distributary channel in the intertidal flats.
- Restoration work at this site would provide expanded area and enhanced value of nearshore subtidal, unvegetated flats, emergent marsh and riparian habitat types.
- Other planned and/or potential habitat restoration work in the Turning Basin area would likely benefit and be benefited by restoration work at this site.
- A habitat restoration project at this site, being above the navigable waterway, would benefit from reduced vessel wake and problems associated with erosion.
- Historically, the site was probably intertidal swamp habitat; the constriction in the channel may have been the location of a native fishing area.
- The site has potential for the development of public access, education and interpretive facilities, including potential linkage to the Duwamish bicycle trail.
- The site is privately owned, with a Seattle City Light transmission easement running across the north end of the site.

Site 2: North Wind Weir. This 4-acre site is located south of the Turning Basin, upstream of the navigable waterway on the west bank of the Duwamish River. The site is directly across the river from Site 1. To the north is a U.S. Postal Service facility; the site is abutted on the south by a small parcel of vacant land and West Marginal Way Southwest. It ranges between 15 feet and 22 feet in elevation. The King County Parks Department is in the process of developing plans for proposed park and trailhead development of the three acres of the site, which it owns. Habitat restoration activities could be completed in conjunction with public access and interpretive displays.

Additional Site Considerations

- This portion of the Duwamish River is believed to be an area important to juvenile salmonid saltwater transition (Eric Warner and Robert Fritz, 1995. The Distribution and Growth of Green River Chinook Salmon and Chum Salmon Outmigrants in the Duwamish Estuary as a Function of Water Quality and Substrate. Auburn, Washington: Muckleshoot Indian Tribe.) A restoration project at this site would also benefit benthic and epibenthic invertebrates, marine fish, a variety of shorebirds and upland mammals.
- The shoreline is riprap, with an area of unconsolidated material on a more gentle slope extending from the toe of the riprap in the lower intertidal to subtidal areas.
- Restoration work at this site would provide expanded area and enhanced value of nearshore subtidal, unvegetated flats, emergent marsh and riparian habitat types.
- A habitat restoration project at this site, being above the navigable waterway, would benefit from reduced vessel wake and problems associated with erosion.
- Other planned and/or potential habitat restoration work in the Turning Basin area would likely benefit and be benefited by restoration work at this site.
- This site has potential for the development of public access, education and interpretive facilities. The King County Parks Department is proposing that the site serve as a trailhead for the adjacent Duwamish bicycle trail.
- Utility easements will require investigation.
- This site could be cooperatively developed with the King County Parks Department.

Table 5: Potential Habitat Development Site Ranking

(Revised January 1996)

Site	Size (acres)	Distance from Contam.	Injury	Habitat Types	Prox. Habitat	Land Use: Exist.	Engr. Cost/ Success	Proximity to Public Facilities	Owner - ship	Publ. Access	Land Use: Potential	TOTAL RANKING SCORE
Site 5: City Light North	High	High/Med	High	Medium	High	High	Low	Medium	High	High	Medium	High
Site 22: Myrtle Edwards	Medium	Medium	High	High/Med	Medium	High	Medium	High	High	High	High	High
Site 2: North Wind Weir	Medium	High	High/Med	Medium	High/Med.	High	Medium	High	High	High/Med	Medium	High
Site 4B: Kenco/City Light S.	Medium	High/Med	High	Medium	High/Med	Medium	Medium	Medium	High	High	High	High
Site 4: City Light South	Medium	Medium	High	Medium	Medium	Medium	High	Medium	High	High	High	High
Site 17: Terminal 105	High	Med/Low	High/Med	Med/Low	High	Medium	High	High	Medium	High	Med/Low	High
Site 26: Seaboard	High	Medium	High	Medium	High	High/Med	Medium	Medium	Low	Medium	Medium	High
Site 23: Pier 89	Medium	High/Med	High	High/Med	Medium	High/Med	Low	High	Low	High	High/Med	High
Site 14: Kellogg Island	High	Medium	High	Med/Low	High	High	Low	Low	Medium	High	High	High
Site 13: Terminal 107	High	Medium	Medium	Low	High	High	Medium	High	Medium	High	Medium	High
Site 1	Medium	High	High/Med	Medium	Low	High/Med.	Medium	High	Low	High/Med	Medium	High
Site 25: West Seattle Shore	Medium	Medium	High/Med	Med/Low	Medium	High/Med	Low	High	High	High	High	Medium
Site 3: Turning Basin	Medium	High	High	Medium	High/Med	Med/Low	Medium	Low	Low	Medium	Medium	Medium
Site 8: Duwamish Pk.	Low	Medium	High/Med	Med/Low	Low	High/Med	High	High	High	High	High/Med	Medium
Site 11B: 1st Ave. S/509 marsh	High	Low	Medium	Med/Low	High	Medium	Medium	High	High	Medium	Low	Medium
Site 30: Smith Cove U/W Park	Low	Medium	High	Low	Low	Medium	High	High	High	High	High	Medium
Site 16: Terminal 108	High	Low	High/Med	Med/Low	High/Med	Medium	Medium	High	Medium	Low	Low	Medium
Site 27: Puget Creek	Low	Medium	Low/Med	Medium	High	High	Medium	Low	Low	High	Medium	Medium
Site 11: 1st Ave. S	Medium	Low	High/Med	Med/Low	Low	Low	High	High	Medium	High	Low	Medium
Site 31: Pier 1	Medium	Low	High/Med	Medium	Low	Medium	Low	High	Low	High	Medium	Medium
Site 18: Spokane St.	Low	Low	High/Med	Low	Low	Med/Low	High	High	High	High	Medium	Medium
Site 7 Sea King Ind. Park	Medium	Med/Low	High/Med	Low	Medium	Med/Low	High	Low	Low	Low	High	Medium
Site 10: Slip 4	Medium	Low	High	Medium	Low	Low	Low	Medium	Low	Medium	Medium	Low
Site 9: South Riverside	Low	Low	High/Med	Med/Low	Low	Med/Low	Medium	Medium	High	Medium	Med/Low	Low
Site 19: East Waterway	Low	Low	High/Med	Med/Low	Low	Med/Low	Low	High	Medium	High	Low	Low
Site 24: Pump Station	Low	Low	High/Med	Med/Low	Low	Medium	Low	Medium	High	Medium	Medium	Low
Site 28: Riverbend Park	Medium	High	Low	Low	Low	Medium	Low	Low	Low	High	Medium	Low
Site 21: Pier 27	Medium	Med/Low	High/Med	Med/Low	Low	Low	Medium	Low	Low	Low	Low	Low
Site 6: Slip 6	Medium	Low	High/Med	Low	Medium	Med/Low	Low	Low	Low	Low	Medium	Low
Site 12: Terminal 115	Low	Medium	High/Med	Low	Low	Med/Low	Low	Low	Low	Medium	Medium	Low
Site 20: Fisher Mills	Low	Low	High/Med	Low	Low	Med/Low	Medium	Low	Low	Medium	Low	Low
Site 29: Longfellow Creek	Low	Low	Low	Low	High/Med	Low	Medium	High	Low	Medium	Low	Low

Concept Document
Addendum No. 2

Elliott Bay/Duwamish Restoration Program

Panel Publication 16

Elliott Bay/Duwamish Restoration Program
NOAA Restoration Center Northwest
National Marine Fisheries Service
7600 Sand Point Way NE
Seattle, WA 98115-0070

(206) 526-4338
(FAX) (206) 526-6665

December 1997

Addendum No. 2 to *Concept Document*

Addendum No. 2 of the *Concept Document*, December 1997, includes the following descriptions of potential real estate acquisitions for habitat restoration projects and a revised "*Table 5: Potential Habitat Development Site Ranking.*"

The sites were originally identified for their habitat potential under the Ecosystem Restoration Study, sponsored by King County and the U.S. Corps of Engineers. The sponsors subsequently approached the Panel and requested that it consider acquisition for Restoration purposes based on confirmation of four criteria, viz :

1. that the sites have recognized value as salmonid habitat;
2. that habitat is intact or readily restorable in function;
3. that habitat would contribute to identified habitat needs in the watershed and estuary;
and
4. that the sites link with prior restoration projects or acquisition reaches.

Pursuant to recommendations of the Habitat Development Technical Working Group, the Panel adopted the three sites for potential acquisition for habitat restoration purposes on October 6, 1997 (Resolution 1997-16). Discussion points included the fact that sponsors had engaged in a review process with the Green Duwamish Watershed Alliance and other organizations, and that acquisition of sites above the Turning Basin Geographic Focus Area is consistent with paragraph twenty seven of the Consent decree, which authorizes the Panel to include tributaries to the Duwamish River for purposes of habitat development. King County also assured the Panel that it has placed a priority on restoration activities at the three sites. Restoration activities associated with all three sites will be included in the County's 1998-2004 Capital Improvement Program..

This addendum was prepared pursuant to Resolution 1997-17, authorizing the amendment of the *Concept Document* to include language describing sites and "Revised Table 5: Site Ranking for Potential Habitat Development."

Site 32: Porter Levee. This site is a long parcel approximately 31 acres in size adjacent to the Green River. Comprising a mosaic of riparian and upland forest, river side channels, and wetlands, much of the site is “disconnected” from the river by the Porter Levee. The site adjoins a parcel owned by the Washington State Department of Natural Resources, and is proximate to other large parcels in public ownership.

Additional Site Considerations

- The current owner of the site has expressed an interest in selling the property for open-space purposes.
- Excellent restoration opportunities exist, as an isolated side channel could be easily reconnected.
- Large scale restoration opportunities include a levee setback.
- Restoration funding is highly likely through identified sources if the parcel is acquired.

Site 33: Burns Creek/Loans Levee. This site includes the mouth of Burns Creek, riparian and upland forest, relic side channel habitat, and upland agricultural lands. Acquisition could range from exclusively areas with habitat restoration potential (approximately 15 acres) to complete site acquisition (30 acres), depending on the interests of the landowner. The site is situated within a reach of the Green River characterized by large river meanders and gravel bars.

Additional Site Considerations

- The willingness of the current landowner to sell all or portions of the parcel is currently unknown.
- Restoration activities at the site could include removal or setback of the riverfront levee and reconstruction of the mouth of Burns Creek.
- Restoration funding is highly likely through identified sources if the parcel is acquired.

Site 34: Black River Confluence (Ft. Dent Park). This site includes the confluence of the Black and Green Rivers, and is located near the upstream limit of tidal influence. The 1-2 acre site is a portion of the much larger adjacent Ft. Dent Park, which is an area for active recreation. The site is located within a reach of the Green River characterized by flood control levees and limited riparian habitat.

Additional site considerations

- The current owner of the site is King County Parks. Though this portion of the park is currently unused, implementation of restoration activities at the Black River confluence would likely require acquisition from Parks.
- Restoration activities could include fill removal and regrading, riparian revegetation, and restoration of channel habitat. A small isolated pond located within the park could also be reconnected to the Black River.
- Restoration funding is highly likely through identified sources if the parcel is acquired.

Table 5: Potential Habitat Development Site Ranking
(Revised November 1997)

Site	Size (acres)	Distance from Contam.	Injury	Habitat Types	Prox. Habitat	Land Use: Exist.	Engr. Cost/ Success	Proximity to Public Facilities	Owner -ship	Publ. Access	Land Use: Potential	TOTAL RANKING SCORE
Site 32: Porter Levee	high	high	medium	high	high	high	high	high	med./low	medium	high	high
Site 34: Black River Confluence	medium	high	medium	high	high	high	high	high	high	high	high	high
Site 05: City Light N.	high	high/med.	high	medium	high	low	medium	medium	high	high	medium	high
Site 22: Myrtle Edwards	medium	medium	high	high/med.	medium	high	medium	high	high	high	high	high
Site 02: North Wind Weir	medium	high	high/med.	medium	high/med.	high	medium	high	high	high/med.	medium	high
Site 33: Burns Cr./Loans Levee	high	high	medium	high	high	high/med.	high/med.	low	low	low	high	high
Site 04B: Kenco/City Light S.	medium	high/med.	high	medium	high/med.	medium	medium	medium	high	high	high	high
Site 04: City Light S.	medium	medium	high	medium	medium	high	high	medium	medium	high	high	high
Site 17: T-105	high	med./low	high/med.	med./low	high	medium	high	high	medium	high	med./low	high
Site 26: Seaboard	high	medium	high	medium	high	high/med.	medium	medium	low	medium	medium	high
Site 23: Pier 89	medium	high/med.	high	high/med.	high	high/med.	low	high	low	high	high/med.	high
Site 14: Kellogg I.	high	medium	high	med./low	high	high	low	low	medium	high	high	high
Site 13: T-107	high	medium	medium	low	high	high	medium	high	medium	high	medium	medium
Site 01	medium	high	high/med.	medium	low	high/med.	medium	high	low	high/med.	medium	medium
Site 25: W. Seattle Shore	medium	medium	high/med.	med./low	medium	high/med.	low	high	high	high	high	medium
Site 03: Turning Basin	medium	high	high	medium	high/med.	med./low	medium	low	low	medium	medium	medium
Site 08: Duwamish Pk.	low	medium	high/med.	med./low	low	high/med.	high	high	high	high	high/med.	medium
Site 11B: 1st Ave. S/509 marsh	high	low	medium	med./low	high	medium	medium	high	high	medium	low	medium
Site 30: Smith Cove U/W Park	low	medium	high	low	low	medium	high	high	high	high	high	medium
Site 16: T-108	high	low	high/med.	med./low	high/med.	medium	medium	high	medium	low	low	medium
Site 27: Puget Creek	low	medium	med./low	medium	high	high	medium	low	low	high	medium	medium
Site 11: 1st Ave. S	medium	low	high/med.	med./low	low	low	high	high	medium	high	low	medium
Site 31: Pier 1	medium	low	high/med.	medium	low	medium	low	high	low	high	medium	medium
Site 18: Spokane Sl.	low	low	high/med.	low	low	med./low	high	high	high	high	medium	medium
Site 07: Sea King Ind. Pk.	medium	med./low	high/med.	low	medium	med./low	high	low	low	low	high	low
Site 10: Slip 4	medium	low	high	medium	low	low	low	medium	low	medium	medium	low
Site 09: S. Riverside	low	low	high/med.	med./low	low	med./low	medium	medium	high	medium	med./low	low
Site 19: E. Wtrway	low	low	high/med.	med./low	low	med./low	low	high	medium	high	low	low
Site 24: Pump. Str.	low	low	high/med.	med./low	low	medium	low	medium	high	medium	medium	low
Site 28: Riverbend Park	medium	high	low	low	low	medium	low	low	low	high	medium	low
Site 21: Pier 27	medium	med./low	high/med.	med./low	low	low	medium	low	low	low	low	low
Site 06: Slip 6	medium	low	high/med.	low	medium	med./low	low	low	low	low	medium	low
Site 12: T-115	low	medium	high/med.	low	low	low	low	low	low	medium	medium	low
Site 20: Fisher Mills	low	low	high/med.	low	low	med./low	medium	low	low	low	low	low
Site 29: Longfellow Creek	low	low	low	low	medium to low	low	medium	high	low	medium	low	low